

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1. (Currently Amended) A multimodal polyethylene polymer comprising a low molecular weight ethylene homo-polymer fraction and a high molecular weight ethylene copolymer fraction, wherein:

- the low molecular weight fraction is present in an amount of ~~45 to 55%~~47 to 52% by weight;
- the high molecular weight fraction is present in an amount of ~~45 to 55%~~48 to 53% by weight;
- the multimodal polymer has a MFR₅ of greater than 0.10 g/10 min; and less than or equal to 0.22 g/10 min; and
- the multimodal polymer has a density of greater than or equal to 952 kg/m³.

2. (Cancelled).

3. (Previously Presented) A multimodal polyethylene polymer according to claim 1 wherein the polymer has a density of greater than or equal to 953 kg/m³.

4. (Previously Presented) A multimodal polyethylene polymer according to claim 1 wherein the polymer has a dynamic viscosity, at a shear stress of 2.7 kPa, of at least 300,000 Pa·s.

5. (Previously Presented) A multimodal polyethylene polymer according to claim 1 wherein the polymer has a shear thinning index of 70 or greater.

6. (Previously Presented) A multimodal polyethylene polymer according to claim 1 wherein the co-monomer of the high molecular weight ethylene copolymer is a C₆ to C₁₂ alpha-olefin.

7. (Original) A multimodal polyethylene polymer according to claim 6 wherein the co-monomer is a C₈ to C₁₀ alpha-olefin.

8. (Previously Presented) A multimodal polyethylene polymer according to claim 1, wherein the ethylene homo-polymer has a MFR₂ of about 300 to 2000 g/10 min.

9. (Canceled).

10. (Canceled).

11. (Previously Presented) In the method of forming a pipe or conduit from a polymeric material, the improvement comprising forming said pipe or conduit from the polymer composition of claim 1.

12. (Previously Presented) Pipe or conduit formed from the composition of claim 1.

13. (Previously Presented) A multimodal polyethylene polymer according to claim 2 wherein the polymer has a density of greater than or equal to 953 kg/m³.

14. (Previously Presented) A multimodal polyethylene polymer according to claim 2 wherein the polymer has a dynamic viscosity, at a shear stress of 2.7 kPa, of at least 300,000 Pa·s.

15. (Previously Presented) A multimodal polyethylene polymer according to claim 3 wherein the polymer has a dynamic viscosity, at a shear stress of 2.7 kPa, of at least 300,000 Pa·s.

16. (Previously Presented) A multimodal polyethylene polymer according to claim 2 wherein the polymer has a shear thinning index of 70 or greater.

17. (Previously Presented) A multimodal polyethylene polymer according to claim 3 wherein the polymer has a shear thinning index of 70 or greater.

18. (Previously Presented) A multimodal polyethylene polymer according to claim 4 wherein the polymer has a shear thinning index of 70 or greater.

19. (Previously Presented) A multimodal polyethylene polymer according to claim 1 wherein said shear thinning index is 100 or greater.

20. (Previously Presented) A multimodal polyethylene polymer according to claim 2 wherein the co-monomer of the high molecular weight ethylene copolymer is a C₆ to C₁₂ alpha-olefin.

21. (Previously Presented) A multimodal polyethylene polymer according to claim 3 wherein the co-monomer of the high molecular weight ethylene copolymer is a C₆ to C₁₂ alpha-olefin.

22. (Previously Presented) A multimodal polyethylene polymer according to claim 4 wherein the co-monomer of the high molecular weight ethylene copolymer is a C₆ to C₁₂ alpha-olefin.

23. (Currently Amended) A multimodal polyethylene polymer comprising a low molecular weight ethylene homo-polymer fraction and a high molecular weight ethylene copolymer fraction, wherein:

(a) the low molecular weight fraction is present in an amount of ~~45 to 55%~~47 to 52% by weight, and has a weight average molecular weight of from about 5,000 to about 50,000 g/mol;

(b) the high molecular weight fraction is present in an amount of ~~45 to 55%~~48 to 53% by weight, and has a weight average molecular weight of from about 300,000 to 900,000 g/mol;

(c) the multimodal polymer has a MFR₅ of greater than 0.10 g/10 min and less than or equal to 0.22 g/10 min; and

(d) the multimodal polymer has a density of greater than or equal to 952 kg/m³.